#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-027189 Address: 333 Burma Road **Date Inspected:** 18-Oct-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai

**CWI Name:** Wai Tao **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** OBG

## **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector R. Hernandez was present during the time noted above and conducted observations relative to the work being performed.

The QA Inspector randomly observed the following work in progress:

## Bay Number 1

Performed verification VT for the component(s) and corresponding welds for component on OBG Barrier Rails assembly listed as E2-SB1-003, E2-SB1-004, E2-SB1-010, E2-SB1D-012, E2SB1D-015, E2-SB1D-016, E2-SB5-011, & E2-SB5-005 for the following designated weld number(s): 001~179. This QA inspector signed green tag #14838.

Performed verification VT for the component(s) and corresponding welds for component on OBG Barrier Rails assembly listed as E5-SB7-001, E5-SB8-001, E5-SB1-005, E5-SB1-007, E5-SB1-011, E5-SB1-013, & E5-SB1-014 for the following designated weld number(s): 001~179. This QA inspector signed green tag #14839.

#### Bay Number 2

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. All components were as listed on NWIT notification no.(s) 07009. The member(s) is/are identified as OBG Side Anchorage assembly. The weld

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designations reviewed are as follows:

- 1. E5-SB1-053-019 & 050.
- 2. E5-SB1B-001-050 & 081.

FCAW welding of fillet weld joint(s) located on lift 14 OBG floor beam identified as FB3320-001 weld number(s) 052 & 053. Welder is identified as welder no. 067877. The welding variables recorded by ZPMC QC identified as Wai Tao. appeared to comply with applicable WPS(s) WPS-B-T-2132-3.

FCAW welding of fillet weld joint(s) located on lift 14 OBG floor beam identified as FB3320-001 weld number(s) 120 & 121. Welder is identified as welder no. 066155. The welding variables recorded by ZPMC QC identified as Wai Tao. appeared to comply with applicable WPS(s) WPS-B-T-2132-3.

FCAW welding of fillet weld joint(s) located on lift 14 OBG floor beam identified as FB3320-001 weld number(s) 060 & 061. Welder is identified as welder no. 066236. The welding variables recorded by ZPMC QC identified as Wai Tao. appeared to comply with applicable WPS(s) WPS-B-T-2132-3.

FCAW welding of fillet weld joint(s) located on lift 14 OBG floor beam identified as FB3320-001 weld number(s) 102 & 103. Welder is identified as welder no. 045227. The welding variables recorded by ZPMC QC identified as Wai Tao. appeared to comply with applicable WPS(s) WPS-B-T-2132-3.

This inspector generated an incident report for complete joint pentration welds not being fit up in accordance with approved details for OBG floor beam FB3343-001 at weld no. 243, 228, & 263.

Bay Number 3

FCAW welding of complete joint penetration weld joint(s) located on lift 14 OBG floor beam identified as FB3286-001 weld number(s) 024. Welder is identified as welder no. 050242. The welding variables recorded by ZPMC QC identified as Wai Tao. appeared to comply with applicable WPS(s) WPS-B-T-2233-TC-U5-F.

FCAW welding of complete joint penetration weld joint(s) located on lift 14 OBG floor beam identified as FB3286-001 weld number(s) 261. Welder is identified as welder no. 044830. The welding variables recorded by ZPMC QC identified as Wai Tao. appeared to comply with applicable WPS(s) WPS-B-T-2233-TC-U5-F.

FCAW welding of complete joint penetration weld joint(s) located on lift 14 OBG floor beam identified as FB3286-001 weld number(s) 112. Welder is identified as welder no. 055491. The welding variables recorded by ZPMC QC identified as Wai Tao. appeared to comply with applicable WPS(s) WPS-B-T-2233-TC-U5-F.

FCAW welding of complete joint penetration weld joint(s) located on lift 14 OBG floor beam identified as FB3286-001 weld number(s) 263. Welder is identified as welder no. 055564. The welding variables recorded by ZPMC QC identified as Wai Tao. appeared to comply with applicable WPS(s) WPS-B-T-2233-TC-U5-F.

FCAW welding of complete joint penetration weld joint(s) located on lift 14 OBG floor beam identified as FB3286-001 weld number(s) 108. Welder is identified as welder no. 062782. The welding variables recorded by

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ZPMC QC identified as Wai Tao. appeared to comply with applicable WPS(s) WPS-B-T-2233-TC-U5-F.

FCAW welding of fillet weld joint(s) located on lift 14 OBG longitudinal diaphragm identified as LD3042-001 weld number(s) 016. Welder is identified as welder no. 062782. The welding variables recorded by ZPMC QC identified as Wai Tao. appeared to comply with applicable WPS(s) WPS-B-T-2132-3.

FCAW welding of complete joint penetration weld joint(s) located on lift 14 OBG longitudinal diaphragm identified as LD3042-001 weld number(s) 113. Welder is identified as welder no. 208035. The welding variables recorded by ZPMC QC identified as Wai Tao. appeared to comply with applicable WPS(s) WPS-B-T-2232-TC-U4b-F.

# Bay Number 4

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. All components were as listed on NWIT notification no.(s) 07013. The member(s) is/are identified as OBG Side Anchorage assembly. The weld designations reviewed are as follows:

- 3. SA3364-001-001
- 4. SA3362-001-001
- 5. SA3361-001-001

Unless otherwise noted above all items observed on this day appeared to be in general compliance with the applicable contract documents

## **Summary of Conversations:**

Pertinent conversations are included in the body of the report.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 1500-0042-02372, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Hernandez,Rene	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer